Method And Apparatus For Remote Installation Of An Operating System Over A Network Connection

Accordingly, we claim:

1 1.   A method of replacing a first operating system executing on a computer

2 having a storage, the storage having at least first and second bootable regions,

3 wherein the first operating system was booted from the first bootable region, the

4 method comprising the steps of:

5   remotely re-booting the computer to boot a copy of the first operating

6 system located on the second bootable region;

7   removing the first operating system from the first bootable region;

8   copying a second operating system onto the first bootable region; and

9   remotely re-booting the computer to boot the second operating system

10 from the first bootable region.

1 2.   The method as described in Claim 1 wherein the second bootable region

2 has first and second sub-regions, wherein the copy of the first operating system

3 is located in the first sub-region of the second bootable region and the second

4 operating system is copied onto the first bootable region from the second sub-

5 region of the second bootable region.

1 3.   The method as described in Claim 2 further including the step of delivering

2 the copy of the first operating system and the second operating system to the

3 computer.

1 4.   The method as described in Claim 3 wherein the copy of the first operating

2 system is delivered to the computer in a compressed format.

1 5.   The method as described in Claim 3 wherein the second operating system

2 is delivered to the computer in a compressed format.

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1   6.   The method as described in Claim 4, the method further comprising the

2   step of decompressing the copy of the first operating system prior to copying a

3   second operating system onto the first bootable region.

1   7.   A method of replacing a first operating system executing on a server

2   having first and second storage disks, wherein the first operating system is

3   booted from the first storage disk, comprising the steps of:

4   receiving, from a remote location, (i) a packed version of the first operating

5   system and (ii) a packed version of a second operating system desired to be

6   installed on the server;

7   unpacking the first operating system onto a first storage partition of the

8   second disk;

9   storing the packed version of the second operating system onto a second

10   storage partition of the second disk;

11   remotely re-booting the server to boot the first operating system from the

12   first storage partition of the second disk;

13   removing the first operating system from the first disk;

14   unpacking the second operating system onto a partition on the first disk;

15   and

16   remotely re-booting the server to boot the second operating system from

17   the partition on the first disk.

1   8.   The method as described in Claim 7 wherein step remotely re-booting the

2   server to boot the first operating system comprises:

3   modifying a boot loader of the server to boot the first operating system

4   from the first storage partition of the second disk.

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1 9.   The method as described in Claim 8 wherein step of remotely re-booting

2 the server to boot the second operating system comprises:

3   reconfiguring the boot loader to boot the second operating system from

4 the partition on the first disk.

1 10.   The method as described in Claim 7 wherein the packed version of the

2 first operating system is encrypted.

1 11.   The method as described in Claim 10, further comprising of decrypting the

2 packed version prior to the step of:

3   unpacking the first operating system onto a first storage partition.

1 12.   The method as described in Claim 7 wherein the step of removing the first

2 operating system from the first disk removes any previously used partitions on

3 the first disk.

1 13.   The method as described in Claim 7, further comprising:

2   preserving network configuration data used by the first operating system

3 to enable the server executing the second operating system following the step of

4 rebooting the server to operate under the second operating system to be reached

5 at a network address used by the server executing the first operating system.

1 14.   The method as described in Claim 7 further comprising:

2   preserving security data used to control access to the server executing the

3 first operating system to enable the server executing the second operating

4 system following step of rebooting the server to operate under the second

5 operating system to be accessed using at least one security setting used by the

6 server executing the first operating system.

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1   15.   The method as described in Claim 7 wherein the packed versions of the

2   first operating system and the second operating system are received over a

3   content delivery network.

1   16.   The method as described in Claim 7 wherein the first operating system is

2   a Linux-based operating system and the second operating system is a Windows-

3   based operating system, or vice-versa.

1   17.   A method of replacing a first operating system executing on a computer

2   having a storage, the storage having at least first and second bootable regions,

3   wherein the first operating system was booted from the first bootable region,

4   comprising the steps of:

5   remotely re-booting the computer to boot a copy of the second operating

6   system located on the second bootable region;

7   removing the first operating system from the first bootable region;

8   copying a third operating system onto a bootable region other than the

9   second bootable region; and

10   remotely re-booting the computer to boot the third operating system from

11   the bootable region other than the second bootable region.

1   18.   In a content delivery network having a set of content servers for caching

2   and serving content on behalf of participating content providers, a method of

3   replacing a first operating system executing on a content server having first and

4   second storage disks, wherein the first operating system is booted from the first

5   storage disk, comprising the steps of:

6   (a)   delivering, over the content delivery network: (i) a packed version of

7   the first operating system and (ii) a packed version of a second operating system

8   desired to be installed on the content server;

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9   (b)   unpacking the first operating system onto a first storage partition of

10   the second disk;

11   (c)   storing the packed version of the second operating system onto a

12   second storage partition of the second disk;

13   (d)   remotely re-booting the content server to boot the first operating

14   system from the first storage partition of the second disk;

15   (e)   removing the first operating system from the first disk;

16   (f)   unpacking the second operating system onto a partition on the first

17   disk; and

18   (g)   remotely re-booting the content server to boot the second operating

19   system from the partition on the first disk.

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